

WHAT IS CLAIMED IS:

1. A method of controlling execution of a data driven type information processing apparatus including  
a router including an M-input, 1-output junction unit and a 1-input, N-output branching unit, controlling input/output of a data packet including  
at least a destination node number, an instruction code and data, and  
a self-synchronous transfer control circuit generating a transfer request signal and a transfer acknowledge signal controlling transfer and operating processes of said data packet, wherein  
transfer rate used in the self-synchronous transfer control circuit in  
said router is made different from the transfer rate used in a system.
2. The method of controlling execution of a data driven type information processing apparatus according to claim 1, wherein  
the transfer rate used in said self-synchronous transfer control circuit of said router is a multiplication of the transfer rate used in said system.
3. The method of controlling execution of a data driven type information processing apparatus according to claim 1, wherein  
the transfer rate used in said self-synchronous transfer control circuit of said router is a total sum of transfer rates of inputs to said router.
4. The method of controlling execution of a data driven type information processing apparatus according to claim 1, wherein  
the transfer rate used in said self-synchronous transfer control circuit of said router is a total sum of transfer rates of outputs from said router.
5. The method of controlling execution of a data driven type information processing apparatus according to claim 1, wherein  
the transfer rate used in said self-synchronous transfer control

5 circuit of said router is larger one of the total sum of the transfer rates of the inputs to said router and the total sum of the transfer rates of the outputs from said router.

6. A data driven type information processing apparatus, comprising:

5 a router including an M-input, 1-output junction unit and a 1-input, N-output branching unit, controlling input/output of a data packet including at least a destination node number, an instruction code and data; and

10 a self-synchronous transfer control circuit generating a transfer request signal and a transfer acknowledge signal controlling transfer and operating processes of said data packet, wherein transfer rate used by the self-synchronous transfer control circuit is different from a transfer rate used in a system.

7. The data driven type information processing apparatus according to claim 6, wherein

5 the transfer rate used in said self-synchronous transfer control circuit of said router is a multiplication of the transfer rate used in said system.

8. The data driven type information processing apparatus according to claim 6, wherein

the transfer rate used in said self-synchronous transfer control circuit of said router is a total sum of transfer rates of inputs to said router.

9. The data driven type information processing apparatus according to claim 6, wherein

5 the transfer rate used in said self-synchronous transfer control circuit of said router is a total sum of transfer rates of outputs from said router.

10. The data driven type information processing apparatus

according to claim 6, wherein

5       the transfer rate used in said self-synchronous transfer control  
circuit of said router is larger one of the total sum of the transfer rates of the  
inputs to said router and the total sum of the transfer rates of the outputs  
from said router.

11. The data driven type information processing apparatus  
according to claim 10, wherein  
a plurality of said routers are combined.